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UNIVERSITY OF CALIFORNIA

City of Berkeley  
Planning Department



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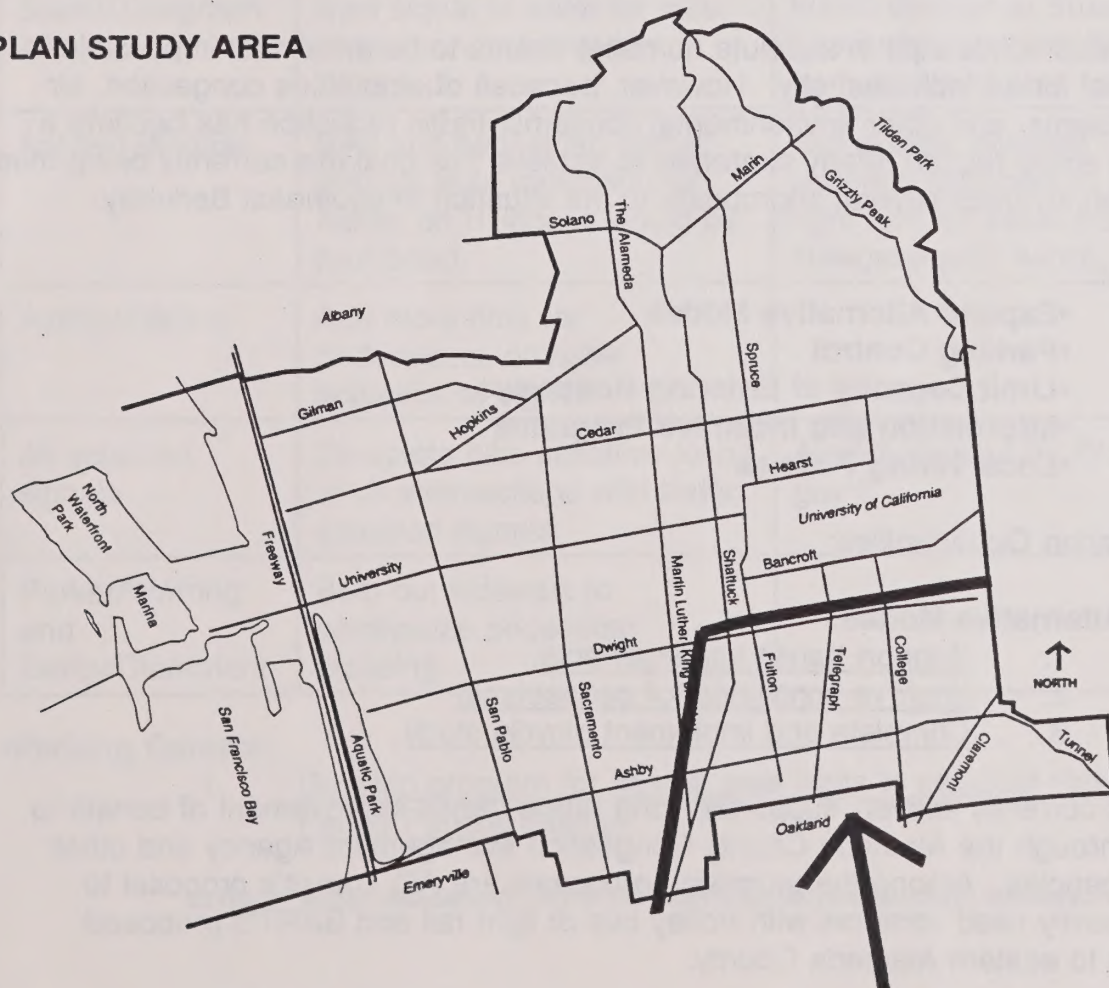
# FINAL DRAFT U.C. NEIGHBORHOODS TRANSPORTATION AND TRAFFIC PLAN

AUGUST 1994

## Introduction

This is a plan for neighborhoods in southeast Berkeley which are significantly affected by traffic from the University of California. The development of this plan was mandated by the agreement between the City of Berkeley and the University of California which was negotiated as a result of the University's Long Range Development Plan. In addition to efforts to deal with traffic impacts associated with the University of California, the plan also recognizes the importance of the downtown as a generator of traffic impacting southeast Berkeley.

## PLAN STUDY AREA





The draft plan proposes three primary goals:

- REDUCE AUTOMOBILE TRAFFIC THROUGH SOUTHEAST BERKELEY.**
- DISCOURAGE THE FLOW OF THROUGH TRAFFIC ON LOCAL STREETS IN SOUTHEAST BERKELEY.**
- DECREASE THE NEGATIVE EFFECTS OF TRAFFIC ON HIGH VOLUME STREETS ON RESIDENTS, PEDESTRIANS, TRANSIT USERS, AND OTHER NON-AUTOMOBILE TRAVELERS.**

For each of these goals general strategies to pursue are identified and specific ways to implement the strategies are also set out.

**GOAL 1: REDUCE AUTOMOBILE TRAFFIC THROUGH SOUTHEAST BERKELEY**

Reducing automobile trips in absolute numbers seems to be an almost impossible-to-achieve goal for an individual city. However, because of ubiquitous congestion, air quality problems, and other environmental concerns, traffic reduction has become a goal of the entire region. Many strategies to achieve this goal are currently being tried and the plan includes several appropriate to the situation in southeast Berkeley.

**Strategies:**

- Expand Alternative Modes**
- Parking Control**
- Limit Capacity of Entering Roadways**
- Information and Incentive Programs**
- Local Hiring Policies**

**Implementation Opportunities:**

•**Expand Alternative Modes:**

1. Support transit improvements.
2. Improve conditions for pedestrians.
3. Complete and implement bicycle study.

The City is currently actively supporting long range transit improvement of benefit to this area through the Alameda County Congestion Management Agency and other regional agencies. Among the promising proposals are AC Transit's proposal to electrify heavily used corridors with trolley bus or light rail and BART's proposed extensions to eastern Alameda County.



Another transit improvement to benefit southeast Berkeley is a current effort by the University of California and the City to supply and market transit alternatives to football game goers.

Pedestrian improvements are useful both as ends in themselves and as adjuncts to transit trips. This report has primarily identified additional signalized crossings of major busy streets as the principal needed improvement for pedestrians (see table below).

The City is now studying some revisions and changes to the current bicycle plan and specific physical improvements. The changes in southeast Berkeley will particularly improve access to the campus for the many cyclists (and potential cyclists) traveling through this area from North Oakland.

Specific Improvements for Bicycles and Pedestrians:

<u>LOCATION</u>	<u>STRATEGY</u>	<u>COMMENTS</u>
Stuart/Telegraph	New signal to allow for safe pedestrian crossing on Telegraph Ave.	Install diverter at Stuart and Ellsworth to protect Stuart from attracted auto traffic.
Ashby/Hillegass	Bike and pedestrian signal; through auto traffic across Ashby on Hillegass would be prohibited.	Signal type includes concrete channels to force right turn for autos from Hillegass onto Ashby.
Ashby/Adeline	Add more time for pedestrians, possible actuation at signal	
All actuated signals	Complete bike sensitive loops at all intersections with traffic actuated signals.	Already funded by Prop. 116 grant.
Parker/Warring and Derby/Claremont	Bulb out sidewalk to emphasize pedestrian crossing	

•**Parking Control:**

1. Develop program for shorter time limits in selected Resident Permit Parking Areas.



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Controlling the amount of parking available is one of the most direct ways the City has available to limit the growth of automobile traffic. The Resident Permit Parking program has been an effective strategy to both limit the availability of parking for commuters and improve parking for residents. In some areas the current two hour limit is not short enough to discourage use by commuters or students. Several neighborhoods have requested shorter limits and some have requested a "local option" where individual areas could choose their own time limits. The plan recommendation is for the City to experiment with shorter time limits in one or two areas to determine the feasibility for the police to enforce shorter limits, the impact on residents and businesses, and the extent to which a shorter limit solves the problem. The Bateman neighborhood in southeast Berkeley (Area A) and the area of the City just north of the U.C. campus (Area F) have been suggested as possible locations for experimentation. An experimental program would be undertaken only after consultation with the residents and merchants.

### •Limit Capacity of Entering Roadways:

1. Negotiate an agreement with U.C. on a capacity limit for Gayley Road.

Many residents of southeast Berkeley, especially those in the Derby/Belrose/Warring corridor feel that traffic through their neighborhood is directly related to Gayley Road, which is owned and controlled by the University. The City and U.C. should negotiate a Memorandum of Understanding (MOU) or other agreement which would limit capacity expansions on Gayley Road and ensure that its operation is consistent with the City's policies for surrounding streets. The MOU should include an annual report to the City Council on daily traffic on Gayley Road in order to track the success of the capacity limit. In general a capacity limitation would consist of an agreement that Gayley would remain one lane in each direction.

### •Information and Incentive Programs:

1. Continue trip reduction programs mandated by City ordinance and U.C. policy.
2. City of Berkeley--Model Employer
3. Develop Joint Goals and Reporting Program to include U.C., City of Berkeley, and L.B.L.

Both the City and U.C. have programs to encourage the use of non-auto travel modes which should be continued. In 1994/95 a number of changes will occur to improve



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employer-based trip reduction efforts. The Bay Area Air Quality Management District will begin to regulate employers of 100 people or more in Berkeley, including U.C., the City, and the Lawrence Berkeley Laboratory. The City will also be considering a staff recommendation to extend its trip reduction requirements to smaller employers, those with 50 or more employees. The City as an employer will undertake a number of innovative but low cost programs to get employees to give up driving alone. In addition, the Employee Commute Coordinator for the City will prepare for Council consideration a program proposing the elimination of free parking for City employees as a trip reduction measure.

The City, the University, and Lawrence Berkeley Lab are the three principal public sector employers in Central Berkeley. In the past, they have shared projects to reduce traffic, including the establishment of Berkeley TRiP. The three should work cooperatively to implement the Bay Area Air Quality Management District rules. The City, U.C., and L.B.L. should adopt a 25% reduction in Drive Alone rate over a five year period--a goal well beyond that required by the BAAQMD--and annually report to the City Council and other governing bodies on progress toward that goal. One goal of a joint planning effort should be that the three agencies should try to achieve programs of equal stringency and impact, even though specific programs may vary.

### •Local Hiring Policies:

1. Negotiate an improved First Source Agreement with U.C.

People who live and work in Berkeley are more likely to walk, bicycle or take transit to work than to drive. Therefore, local hiring policies can improve traffic problems. First Source is a program whereby the City provides qualified applicants to interview for positions. Hiring First Source applicants is not a requirement of the program, but the City's goal is placement, not just interviews. U.C. and the City have established a First Source Agreement. The agreement is limited to permanent positions and construction contracts. The First Source Program has not been successful at placing a large number of applicants into U.C. positions. The agreement needs to be reviewed and revised to lead to greater numbers of successful placements in order to have a beneficial impact on traffic.



**GOAL 2: DISCOURAGE THE FLOW OF THROUGH TRAFFIC ON LOCAL STREETS IN SOUTHEAST BERKELEY**

**Strategies:**

•Make travel on local streets in the area more difficult using stop signs, diverters, and speed humps--targeting demonstrated safety problems, short cuts around intersections, and long blocks with speeding problems.

**Specific Implementation Opportunities:**

N'hood	Location	Strategy	Comment
CENA	Derby/Belrose/Warring	Truck Restrictions	Prohibit trucks over certain weight limits; in process of adoption now.
CENA	Derby at Claremont	Fixed time signal test	Test efficacy in reducing traffic and track environmental impacts for 3 to 6 months
CENA	Russell at Pine	Stop signs--three way	To reduce speeding and discourage short cutting
CENA	Piedmont between Parker and Derby	Speed humps	To reduce speeding and discourage short cutting
CENA	Woolsey between College and Claremont	Speed humps	To reduce speeding and discourage short cutting
CENA	All semi-diverters	Add sign explaining penalty	To reinforce compliance; survey neighbors regarding effectiveness after six months
Willard	Hillegass between Parker and Stuart (2 blocks)	Speed humps	To reduce speeding
Willard	Benvenue at Stuart	Stop signs--four ways	To discourage through traffic
Willard	Benvenue between Stuart and Russell	Speed humps	To discourage speeding



N'hood	Location	Strategy	Comment
Willard	Benvenue at Ashby	Right turn only from Benvenue southbound to Ashby	To improve safety at location with a relatively high accident rate now
Willard	All semi-diverters	Add penalty sign	To reinforce compliance; survey neighbors regarding effectiveness after six months
Bateman	Benvenue between Webster and Woolsey	Speed humps	To discourage speeding and short cutting.
Bateman	Hillegass between Webster and Woolsey	Speed humps	To discourage speeding and short cutting
Bateman	Woolsey near Colby	Speed humps	To discourage speeding and short cutting
Bateman	All semi-diverters	Add penalty sign	To reinforce compliance; survey neighbors regarding effectiveness after six months
Le Conte	Parker at Ellsworth	Diagonal diverter, NE to SW corners	To prevent through traffic
Le Conte	Carleton between Ellsworth and Fulton	Speed humps	To discourage speeding and through traffic
Le Conte	Ward at Telegraph	Semi-diverter on westbound lane	To discourage through traffic
Le Conte	Stuart at Ellsworth	Diagonal diverter, NE to SW corners	To prevent through traffic if a signal is installed (see arterial strategy--signal at Stuart/Telegraph)
Le Conte	Oregon between Shattuck and Fulton	Speed humps	To discourage speeding and through traffic



N'hood	Location	Strategy	Comment
Le Conte	Oregon at Ellsworth	Stop signs--four way	To slow traffic at LeConte School
Le Conte	Russell at Fulton	Stop signs--four way	To slow traffic at LeConte School
Le Conte	Russell between Telegraph and Ellsworth	Speed humps	To discourage speeding and through traffic
Le Conte	All semi-diverters	Add penalty sign	To reinforce compliance; survey neighbors regarding effectiveness after six months
Bartview-Wheeler/Woolsey	Emerson between Tremont and Shattuck	Speed humps	To discourage speeding and short cutting
BV-W/W	Essex between Tremont and Shattuck	Speed humps	To discourage speeding and short cutting
BV-W/W	Prince at Wheeler	Stop signs--four way	To discourage speeding and through traffic
BV-W/W	Wheeler at Woolsey	Channelize intersection	Add center island or bumped out curbing or other treatment to narrow the roadway
BV-W/W	Webster near Telegraph	Add hump at semi-diverter	Demonstration installation--survey neighbors after 6 months
BV-W/W	Prince near Deakin	Add hump at semi-diverter	Demonstration installation--survey neighbors after 6 months

**•Improve the flow of traffic on major streets and make intersections between these streets work better through signal coordination, improving intersection operation, and selective parking restrictions.**



Specific implementation opportunities:

LOCATION	PROBABLE STRATEGY	STAFF COMMENTS
Ashby/Telegraph	Left turn arrows; parking restrictions near corner at peak hours.	Left turn signals slow through traffic but improve safety.
Ashby/College	Retain existing "no parking" near the intersection at peak hour; improve signage to other parking.	
Ashby/Claremont	Optimize signal timing	
Tunnel/Claremont Hotel	Add left turn lane serving hotel	Only if funded by hotel; requires right-of-way from hotel property.
Ashby/Shattuck	Parking restrictions at the peak, near the intersection	Gain space to allow for turns while maintaining flow of through traffic.
M.L.K./Adeline	Improve signal timing	Allow more time for SB Adeline traffic
College/Alcatraz	Modify signal	Left turn signal from College to Alcatraz; no right turn on red from EB Alcatraz
Ashby Ave.	Restrict some parking in the peak hour near signalized intersections	Select locations carefully; eliminate current restrictions if not needed
Major Streets	Signal timing improvements	Eliminate unnecessary congestion when possible.
City-wide	Complete truck route system	
Routes to freeways	"Trailblazer" signs	Encourage specific routes, discourage others



The two strategies, neighborhood protection on the one hand and traffic flow improvements on the other hand, work together to solve the problem of commute traffic in residential neighborhoods. This is because drivers tend to choose the fastest, most direct route to their destination. If major streets are operating well, they are usually the fastest route for many trips. However, when queues of cars block the streets and intersections, local streets become the route of choice.

Improving flow on the major streets and from one major street to another is an important part of protecting local streets. In southeast Berkeley, traffic on many of the major streets flows at less than 10 mph in the peak hours, making neighborhood short-cutting very attractive. The goal of improving flow does not anticipate widenings on Berkeley's major streets or "creating freeways" through our residential areas but simply instituting enough improvement in an effort to ensure that congestion does not discourage drivers from staying on the major streets.

Speed humps, diverters and other strategies inside the residential neighborhood can solve a variety of problems. They can block commuters' way around congested signalized intersections. They can also be used to slow traffic that does come into the neighborhood. Cars going faster than the speed limit are a problem on local residential streets. Even though it may not always cause a safety problem, it disturbs the tranquility of the neighborhood. Speeding can be a particular problem for long straight blocks. Sometimes speeders and shortcutters are commuters, sometimes local residents are using well-known neighborhood shortcuts.

**•Divert commute traffic to preferred routes "upstream" from Berkeley.**

Specific Implementation Opportunities:

1. Work with Caltrans and the City of Oakland to change signs on Route 24 to show Telegraph Avenue as an alternative route to Tunnel Road into Berkeley.
2. Request Caltrans to install ramp meters, with an HOV bypass lane at the Tunnel Road on-ramp to Route 24 eastbound to encourage greater use of car pools.
3. Work with the Telegraph Ave./South Campus Planning Committee to ensure that impacts on southeast Berkeley are considered in planning changes in the Telegraph Ave./South Campus area;



specifically, use computer model to consider two way operation on Dwight and other South Campus streets.

Some decrease in traffic on major streets in southeast Berkeley will occur with the improvement of the Landvale Interchange at the junction of Routes 13 and 24 and with the replacement of the Cypress facility. The additional strategies above are not likely to have a large enough impact to make a dramatic difference in the through traffic in southeast Berkeley. But they will help make the best possible use of other improvements such as improved flow along major streets.

**GOAL 3:      DECREASE THE NEGATIVE EFFECTS OF TRAFFIC ON HIGH VOLUME STREETS ON RESIDENTS, PEDESTRIANS, TRANSIT USERS, AND OTHER NON-AUTOMOBILE TRAVELERS.**

**Strategy:**

- **Attend to and improve the quality of life for people living on residential major streets and collectors through additional pedestrian signals and experimentation with traffic calming techniques suitable for collectors and major streets**

Most of the major streets and collector streets in the study area have homes along their length, just like the local streets. City policy since the mid-1970s has been to route as much through traffic as possible to the major and collector streets. Despite this, the City can do some things to improve life for residents on or near busy streets. Traffic signals help bicyclists and walkers and make a busy arterial less of a barrier. Street trees can screen the sight of traffic. Some cities, primarily in Europe, have begun experimenting with traffic-calming techniques like special kinds of speed humps and channelization on major high-volume streets. The intention is not to divert traffic but to slow it and "calm" it and provide safer crossings for pedestrians.

It is important to note that traffic "calming" techniques do run counter to efforts to improve flow on the major streets. The key is to try to balance the two efforts. Traffic "calming" may be particularly appropriate to collector streets where the function of carrying through traffic is less than for major streets.



Specific Implementation Opportunities:

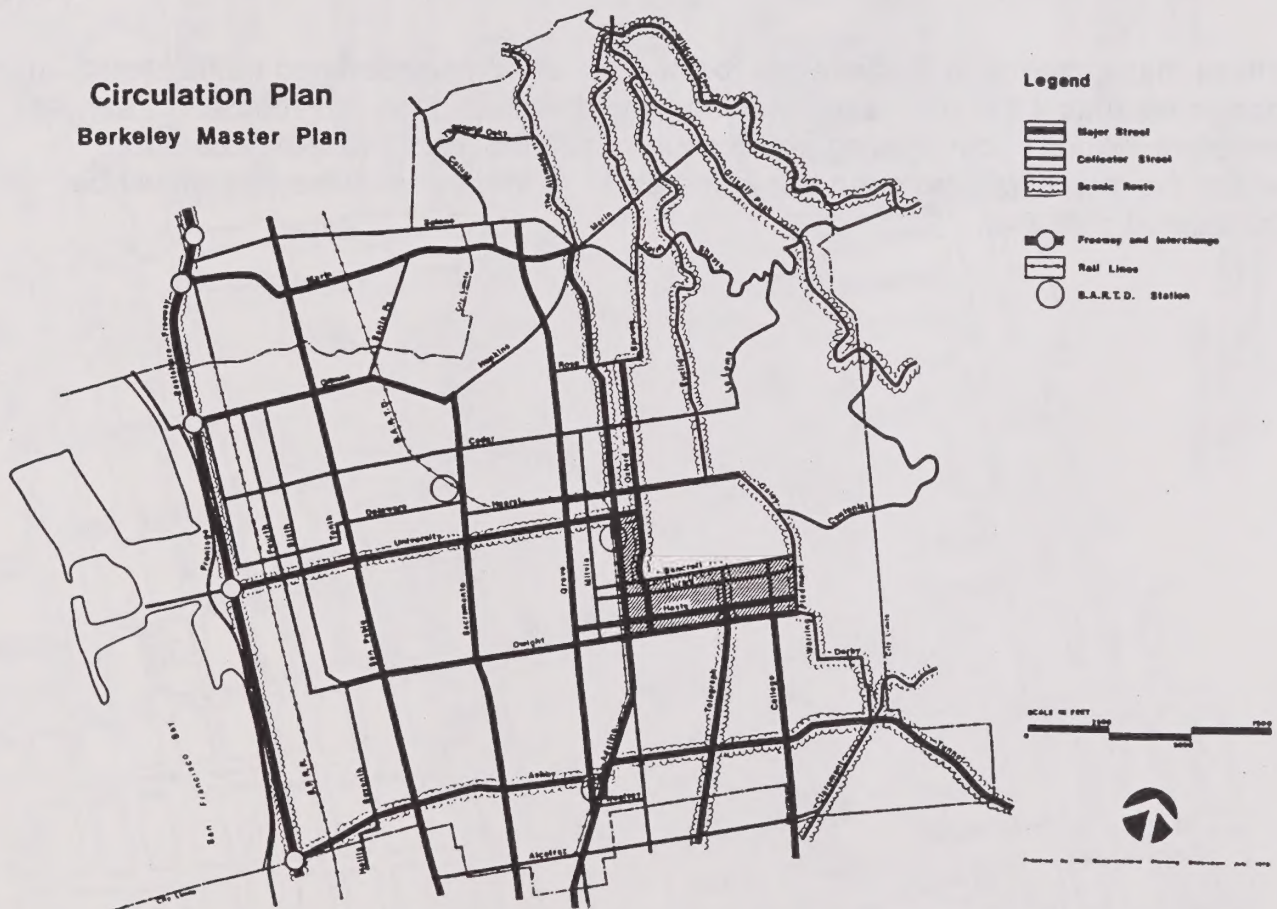
1. Traffic signals to improve conditions for pedestrians and bicycles (see Goal 1).
2. The City of Berkeley to initiate cost/benefit analysis of the withdrawal of Ashby Ave. from the state highway system and action based the results.
3. Work with residents to develop an experimental traffic-calming plan for Derby/Belrose/Warring and submit for funding.
4. Work with U.C. to initiate design studio to plan for Claremont/Ashby/Tunnel vicinity emphasizing the pedestrian scale of the commercial area.
5. Implement fixed-time signal test at Derby/Claremont, previously approved by Transportation Commission.



## Appendix A

### Street Definitions

The 1977 City of Berkeley Master Plan adopted a street classification system which is virtually identical to that in existence today. The below 1977 Plan map shows streets classified as "major," and "collector." Local streets are those which are not shown on the map. The distinction between streets is based on the travel function desired for them.



The City adopted different policies towards the three types of streets. Major streets were to carry through and commercial traffic, collector streets were to deliver local traffic to major streets, local streets were to serve as access for neighborhood residents. In Berkeley, like many older cities, the road classifications are not necessarily harmonious with the size of the road or the adjacent land uses. Almost all major streets have long stretches of residential use which may be incompatible with heavy traffic. Some collectors are narrower than some local streets and may carry as much traffic as some major streets. In addition, some local streets carry a significant amount of through traffic.





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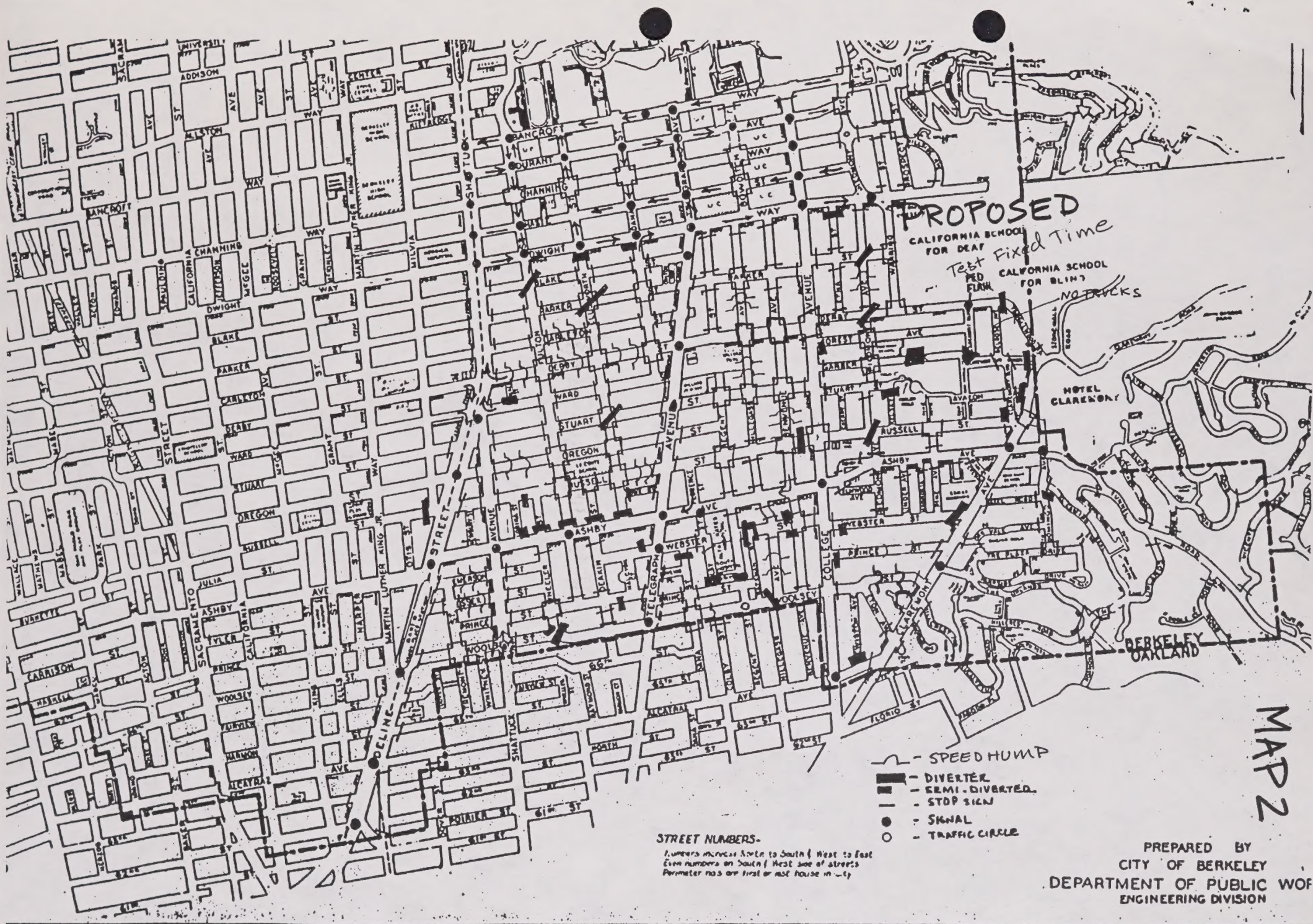
Appendix B:

Map 1: EXISTING NEIGHBORHOOD TRAFFIC CONTROL AND DESIGN FEATURES

Map 2: PROPOSED NEIGHBORHOOD TRAFFIC CONTROL AND DESIGN FEATURES

These maps attempt to illustrate the "before and after" neighborhood traffic control and design features if this plan is adopted and implemented. Map 2 (Proposed...Features) therefore includes both existing and proposed installations. There may be errors where the map differs from the text in the plan. In those cases, the text should be considered definitive.





MAP 2

PREPARED BY  
 CITY OF BERKELEY  
 DEPARTMENT OF PUBLIC WORKS  
 ENGINEERING DIVISION



